

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF VERMONT

CHET'S SHOES, INC.,	:	
	:	
Plaintiff,	:	
	:	
v.	:	File No. 1:08-CV-197
	:	
SIDNEY KASTNER,	:	
	:	
Defendant.	:	

RULING ON PLAINTIFF'S MOTION FOR SUMMARY JUDGMENT,
DEFENDANT'S CROSS MOTION FOR SUMMARY JUDGMENT,
AND PLAINTIFF'S MOTION TO STRIKE
(Papers 45, 48, and 52)

This is a patent infringement case dealing with studded rubber overshoes. Plaintiff Chet's Shoes, Inc. ("Chet's Shoes") requests an injunction and declaratory judgment that its products do not infringe two patents held by defendant Sidney Kastner ("Kastner"). Kastner, in turn, counterclaims for patent infringement. The case is before the Court on cross motions for summary judgment (Papers 45 and 49), and a motion to strike by Chet's Shoes (Paper 52).

I. Background

Chet's Shoes is a Minnesota corporation in the business of selling industrial and outdoor footwear. Among other things, Chet's Shoes sells rubber overshoes, which fit over a wearer's existing shoes and provide traction and protection against the elements. Sidney Kastner is a Canadian citizen with residence in

Stowe, Vermont. Kastner holds two U.S. patents for the design of shoe soles with retractable metal studs.

In 2006, Kastner sent a letter to Chet's Shoes alleging two of Chet's overshoe products infringed on his patents. Paper 45-13. Walter Ames, Kastner's patent counsel at the time, followed up with similar letters in late 2006 and early 2007. Papers 45-14, 45-15. The letters from Kastner and Ames requested Chet's Shoes enter a licensing agreement with Kastner for use of his patents, or stop selling the allegedly infringing products.

No agreement was reached, and in 2008 Kastner filed suit against "Chet's Safety Supply," claiming patent infringement.¹ Two days later, Chet's Shoes filed the instant case against Kastner, seeking a declaratory judgment of non-infringement. The former case (No. 1:08-cv-195) was dismissed without prejudice to allow resolution of all issues in a single lawsuit, and in the instant case (No. 1:08-cv-197) Kastner filed a counterclaim for patent infringement.

The parties have conducted discovery, submitted Markman briefs addressing claim construction, and now present cross motions for summary judgment. Chet's Shoes also moves to strike Kastner's motion for summary judgment and a supporting

¹ "Chet's Safety Supply" appears to be a trade name of Chet's Shoes, Inc., used for a mail-order business serving industrial customers.

declaration for failing to comply with the Court's pretrial scheduling order.

The parties' dispute revolves around Kastner's two U.S. patents – numbered 5,634,283 and 6,915,595 – and four pairs of overshoes sold by Chet's Shoes. The following sections describe each in turn.

A. The '283 Patent

Patent 5,634,283 was issued to Sidney Kastner on June 3, 1997, and describes a "resilient, all-surface sole" for a shoe or boot, in which metal studs extend out from the sole but retract into the sole under pressure. The patent's abstract states:

[M]etal studs are mounted in the sole and extend beyond the bottom surface of the sole to such an extent that when the footwear embodying the sole is worn, the metal stud is depressed within the sole until the tips of the studs are substantially at the plane of the bottom surface of the sole.

Paper 24-1 at 1. Explaining the need for the invention, the background section of the patent notes how conventional studded shoes (such as golf shoes) can be "unstable and uncomfortable" when worn on hard surfaces like concrete. Id. at 4 (col. 1, line 42). The background section also suggests a retractable studded sole could be used on running shoes meant for mixed surfaces, like turf, ice, and concrete. Id. (col. 1, lines 50-60).

The patent specification explains the basic idea: metal studs are mounted in the resilient material (e.g., rubber) of the sole, with their tips protruding from the bottom surface of the

sole. When used on a hard surface, the wearer's weight pushes the metal studs up into the resilient material of the sole, bringing the tips of the studs flush with the bottom surface of the sole. Id. (col. 2, lines 13-32).

The '283 patent contains two independent claims. Claim 1 describes the basic sole with embedded studs:

1. A resilient, all-surface sole for footwear, said sole having a bottom surface and an upper surface and being formed from resilient material of a substantial thickness located between said surfaces and being subject to compressive deformation, comprising:
a plurality of metal studs mounted in said sole, each of said studs having an anchoring portion embedded in and surrounded by said resilient material . . . a shaft portion fixed to said anchoring portion . . . and a tip portion in which said shaft portion terminates, said stud having a length such that when said footwear is unworn, said tip portion extends outwardly beyond the plane of said bottom surface, the compressive deformation of said resilient material being coordinated with the distance said tip portion extends beyond the plane of said sole bottom surface . . . such that pressure exerted on said metal studs by the weight of a wearer of said footwear will cause said studs to retract within said resilient sole until said tip of said stud is substantially at the plane of said bottom surface of said sole.

Id. at 6 (col. 5, lines 65-67; col. 6, lines 1-19). Claim 12 describes the same resilient sole but with cleats, where the retractable metal studs extend out from the cleats:

12. A resilient, all-surface sole for footwear, said sole having a bottom surface and an upper surface and being formed from a resilient material of substantial thickness located between said surfaces and being subject to compressive deformation, comprising:
a plurality of cleats formed from a second resilient material attached to and spaced along said bottom

surface of said sole, said cleats terminating outwardly in a lower surface to contact a surface on which the wearer walks; a plurality of metal studs mounted in said sole and extending axially through at least some of said cleats, each of said studs having an anchoring portion embedded in and surrounded by said resilient material of said sole . . . a shaft portion fixed to said anchoring portion . . . and a tip portion in which said shaft portion terminates, said stud having a length such that when said footwear is unworn, said tip portion extends outwardly beyond the plane of said lower surface of said cleat, the compressive deformation of said resilient material of said sole and said second resilient material of said cleat being coordinated with the distance said tip portion of said stud extends beyond the plane of said cleat lower surface . . . such that pressure exerted on said metal studs by the weight of the wearer of said footwear will cause said studs to retract within said resilient sole and said resilient cleats until said tip of said stud is substantially at the plane of said lower surface of said cleat.

Id. at 6-7 (col. 6, lines 55-67; col. 7, lines 1-20). The remaining claims are dependent on these two, as they describe specific embodiments of the general ideas contained in Claims 1 and 12.

B. The '595 Patent

Patent 6,915,595 was issued to Sidney Kastner on July 12, 2005, and is entitled "resilient, all-surface soles for footwear." The '595 patent describes itself as an improvement on the '283 patent, building on the same idea of retractable metal studs on a shoe sole. Paper 45-5 at 6 (col. 1, lines 39-67).

Explaining the need for improvement, the '595 patent notes that lightweight wearers or scratchable floors make a more

easily-retracting stud desirable. Id. (col. 1, lines 54-67).

Using the original '283 design, an easily-retracting stud would require forming the sole out of a relatively soft material, which in turn would wear out quickly with use. Id. To address this issue, the '595 patent offers two design improvements. First, the '595 patent instructs that a sole can be made of materials with varying resilience, such that the studs are anchored in a softer portion, yet the bottom surface is composed of a harder rubber. This design allows for easier stud retraction but also provides a wear-resistant bottom surface for the shoe. Id. (col. 2, lines 15-42). Second, the '595 patent describes creating annular grooves — small cut-out spaces — around each stud, giving the metal studs space to bend and flex slightly under pressure. This design feature theoretically reduces scratching on the walked-on surface. Id. (col. 2, lines 43-52).

The '595 patent contains two independent claims, reflecting each of these design improvements. Claim 1 describes the varying-resilience idea:

1. A resilient, all-surface solo [sic] for footwear, said sole having a bottom, work contacting surface and an upper surface sad [sic] being formed from a resilient material of substantial thickness located between said surface and being subject to compressive deformation, comprising:

a plurality of studs mounted in said sole, each of said studs having an anchor portion embedded in said resilient material, a tip portion extending slightly beyond the plane of said bottom surface of said sole, and a shaft connecting said anchor portion and said tip portion,

said resilient material being non-uniform in its degree of resilience and being less resilient at an exterior portion at said bottom surface of said sole and more resilient at an interior portion of said sole,

said anchor portion being embedded in said sole at said more resilient portion and having a body of said more resilient material positioned between it and said upper surface, so that when said footwear is worn and compressive deformation is applied to said bottom surface of said sole, said tip portion is caused to retract within said sole by force directed by said stud anchor against said more resilient interior portion while said less resilient exterior portion of said sole provides wear resistance

Id. at 8 (col. 5, lines 54-67; col. 6, lines 1-11). Claim 8 describes the idea of annular recesses around the studs:

8. A resilient, all-surface sole for footwear, said sole having a bottom, work contacting surface and an upper surface and being formed from a resilient material of substantial thickness located between said surfaces and being subject to compressive deformation, comprising:

a plurality of studs mounted in said sole, each of said studs having an anchor portion embedded in said resilient material, a tip portion extending slightly beyond the plane of said bottom surface of said sole, and a shaft connecting said anchor portion and said tip portion,

said resilient material being non-uniform in its degree of resilience and being learn [sic] resistant at an exterior portion at said bottom surface of said sole and more resilient at an interior portion of said sole,

said anchor portion being embedded in said sole at said more resilient portion, said bottom surface of said sole being formed with a recess at the location where said tip portion extends outwardly from the plane of said bottom surface,

so that when said footwear is worn and compressive deformation is applied to said bottom surface of said sole, said tip portion is caused to retract within said sole by force directed by said stud

anchor against said more resilient interior portion and said tip portion flexes in said recess

Id. (col. 6, lines 37-65). Note that while Claim 8 is phrased as an independent claim, it also includes the concept of variable resilience from Claim 1. The remaining claims in the '595 patent (Claim 2 through Claim 7) are explicitly dependent on Claim 1.

C. The Accused Products

When Kastner first contacted Chet's Shoes in 2006 regarding possible infringement, Chet's Shoes was selling two overshoes manufactured by Weinbrenner Shoe Company under the brand "Thorogood." Paper 50 ¶¶ 3-5. One product was a low-cut two-buckle studded rubber overshoe designated Model 13, and the other was a high-cut zippered studded rubber overshoe designated Model 17. Papers 45-9, 45-10 (physical exhibits). Chet's Shoes stopped selling the Thorogood products in 2006, and switched to two nearly identical products under the "Snowgear" brand. Snowgear Model 13 is a low-cut two-buckle studded rubber overshoe, and Snowgear Model 17 is a high-cut zippered studded rubber overshoe. Papers 45-11, 45-12 (physical exhibits). Kastner argues patent infringement with respect to all four products, Paper 49 at 6, so these four models of overshoe will be referred to collectively as the "Accused Products."

The Accused Products all have a multi-layer sole design, in which the uppermost layer (the insole) is composed of a rubber-coated fabric, the middle layer (the midsole) is composed of two

different types of rubber — a filler on top of sheet rubber — and the bottom layer (the outsole) is composed of two molded pieces of rubber with cleats. See Paper 45-1 at 5 (diagram of sole design). Each outsole has 44 round cleats plus a raised heel section; the Thorogood and Snowgear heel sections vary somewhat. See Paper 45-23 (illustration of heel designs).

The Accused Products also have metal studs embedded in their outsoles. Each stud is shaped like a "T" in longitudinal cross-section, with a flat anchor portion, shaft, and tip. The studs are set into the molded rubber outsole such that their tips protrude a few millimeters from the ends of the cleats. Not every cleat has a metal stud; the Thorogood products have sixteen studs, and the Snowgear products have twenty studs plus two in the raised heel section. Paper 50 ¶ 20-21.

For those cleats containing studs, the stud anchor is embedded at approximately the level of the bottom of the cleat. See Paper 50 ¶ 19 (diagram). That is, if an imaginary dividing line existed where the cylindrical cleat meets the flat outsole, the stud anchor would lie just on the "cleat" side of this dividing line. See Paper 51-2 (physical exhibit of cut-away cleat). In the Accused Products, however, the cleats and the flat portion of the outsole are formed with a single piece of molded rubber, so there is no actual dividing line between cleat and outsole.

II. Discussion

Both parties move for summary judgment, with Chet's Shoes arguing the facts conclusively establish non-infringement, and Kastner arguing the reverse. Papers 45, 49. Chet's Shoes also moves to strike Kastner's motion and supporting declaration.

Paper 52. The Court considers the merits first, and then turns to the motion to strike.

A. Summary Judgment Standard

A party moving for summary judgment must provide sufficient factual evidence to support a legal finding in his favor, then point out the lack of evidence supporting his opponent's legal position. Celotex Corp. v. Catrett, 477 U.S. 317, 323, 325 (1986). In the patent context, "[s]ince the ultimate burden of proving infringement rests with the patentee, [a party] seeking summary judgment of noninfringement may meet its initial responsibility either by providing evidence that would preclude a finding of infringement, or by showing that the evidence on file fails to establish a material issue of fact essential to the patentee's case." Novartis Corp. v. Ben Venue Labs., Inc., 271 F.3d 1043, 1046 (Fed. Cir. 2001).

The court reviews the evidence in a light most favorable to the non-moving party, and draws all reasonable inferences in that party's favor. Id. If "there is no genuine issue as to any material fact," and the facts establish that the moving party is

entitled to judgment as a matter of law, then the court should grant the motion. Fed. R. Civ. P. 56(c); accord Celotex, 477 U.S. at 322. A "material fact" is one that "might affect the outcome of the suit under the governing law." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1984). A "genuine issue," in turn, means the evidence diverges enough to support a finding in favor of either party. Id. If a genuine issue of material fact exists, the court must deny the motion. Fed. R. Civ. P. 56(c). In patent cases, "'[s]ummary judgment on the issue of infringement is proper when no reasonable jury could find that every limitation recited in a properly construed claim either is or is not found in the accused device either literally or under the doctrine of equivalents.'" U.S. Philips Corp. v. Iwasaki Elec. Co., 505 F.3d 1371, 1374 (Fed. Cir. 2007) (quoting PC Connector Solutions LLC v. SmartDisk Corp., 406 F.3d 1359, 1364 (Fed. Cir. 2005)).

B. Patent Infringement Framework

Patent infringement analysis involves two steps. "The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device accused of infringing." Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc) (internal citation omitted).

In construing the patent claims, the court examines the language of the patent and interprets – as a matter of law – the meaning of the claims. Id. at 979. “To ascertain the meaning of claims, [courts] consider three sources: The claims, the specification, and the prosecution history.” Id. (quoting Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1561 (Fed. Cir. 1991)). In addition, courts can look to extrinsic evidence such as expert testimony, dictionaries, and treatises on the technical field. Id. at 980.

Having determined the proper claim construction, the court then compares each limitation in the patent claim to the accused product, asking whether the limitation is literally met. Id. at 976. If even a single element is not present in the accused product, no literal infringement can be found. See U.S. Philips, 505 F.3d at 1374-75; Wolverine World Wide Inc. v. Nike, Inc., 38 F.3d 1192, 1199 (Fed. Cir. 1994). A finding of infringement can also be reached, however, via the doctrine of equivalents. Under this doctrine, the court asks whether a claim limitation is met in essence, even though not literally, such that a finding of infringement is justified. See Voda v. Cordis Corp., 536 F.3d 1311, 1324 (Fed. Cir. 2007). There are two formulations of the doctrine of equivalents:

Under the insubstantial differences test, “[a]n element in the accused device is equivalent to a claim limitation if the only differences between the two are insubstantial.” Honeywell Int'l Inc. v. Hamilton

Sundstrand Corp., 370 F.3d 1131, 1139 (Fed. Cir. 2004). Alternatively, under the function-way-result test, an element in the accused device is equivalent to a claim limitation if it "performs substantially the same function in substantially the same way to obtain substantially the same result." Schoell v. Regal Marine Indus., Inc., 247 F.3d 1202, 1209-10 (Fed. Cir. 2001).

Id. at 1326. Both literal infringement and infringement under the doctrine of equivalents are questions of fact, Braun Inc. v. Dynamics Corp. of Am., 975 F.2d 815, 819 (Fed. Cir. 1992), but where "no reasonable jury" could find to the contrary, summary judgment is appropriate, U.S. Philips, 505 F.3d at 1375.

C. Claim Construction

The operative portion of a patent is the claim, which "delimit[s] the right to exclude." Markman, 52 F.3d at 980. Therefore to determine the scope of a patent, the court must interpret the language of the claim. Claim interpretation starts with the plain meaning of the text, as "[c]laim terms must be given 'the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention.'" Voda, 536 F.3d at 1319 (quoting Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc)); accord Wolverine World Wide, 38 F.3d at 1196.

The claim language is also informed by the specification in the patent, where the patentee may add further detail or define particular terms. Markman, 52 F.3d at 979-80 ("For claim construction purposes, the [specification] may act as a sort of

dictionary, which explains the invention and may define terms used in the claims."). Courts can look to the patent's prosecution history as well, as the patentee's exchanges with the U.S. Patent and Trademark Office during the issuance process can clarify the precise scope of the claim. *Id.* at 980.

Finally, to the extent the claim language is still unclear, courts may refer to "extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." Voda, 536 F.3d at 1319 (internal quotation and citation omitted). Such extrinsic evidence may take the form of expert testimony, treatises on the technical field, and dictionaries. Markman, 52 F.3d at 980. Overall, the various sources of meaning "'should be accorded relative weights depending on the circumstances of the case, with intrinsic sources [i.e., the text, specification, and prosecution history] being the most relevant.'" Voda, 536 F.3d at 1319 (quoting Microprocessor Enhancement Corp. v. Tex. Instruments Inc., 520 F.3d 1367, 1378 (Fed. Cir. 2008)).

i. Claim Construction of the '283 Patent

The parties' Markman briefs address numerous aspects of the '283 patent. Papers 23, 26, 28, 29. For present purposes, the important issues are (1) whether the term "sole" in Claim 1 can encompass a cleated sole, (2) whether the term "second resilient material" in Claim 12 necessarily means a different material from

that of the sole, (3) the meaning of the term "retract" in both Claim 1 and Claim 12, and (4) the meaning of the term "weight of the wearer" in both Claim 1 and Claim 12. The first two issues are intertwined and will be resolved together.

a. "Sole" and "Second Resilient Material"

Claim 1 of the '283 patent uses the term "sole" to refer to a part of a shoe "having a bottom surface and an upper surface and being formed from resilient material of a substantial thickness located between said surfaces and being subject to compressive deformation." Paper 24-1 at 6 (col. 5, lines 66-67; col. 6, lines 1-2). From this description the sole is clearly a piece of rubber (or other resilient material) with a "bottom surface," but there is no indication of what form the bottom surface must take, and in particular whether the bottom surface can have cleats.

Chet's Shoes argues the term "sole" in Claim 1 should not be read to include cleats. Paper 23 at 7. Primary support for this view comes from the existence of Claim 12, since the main feature distinguishing Claim 12 from Claim 1 appears at first glance to be a cleated bottom. Chet's Shoes believes if the term "sole" were already meant to include cleats, Claim 12 would be unnecessary. Chet's Shoes also points to the language of Claim 12, which describes cleats as "attached to and spaced along said bottom surface of said sole." Id. at 6 (col. 6, lines 62-63).

By describing one as "attached to" the other, Claim 12 could be seen as indicating the term "sole" does not encompass cleats.

Kastner argues the term "sole" in Claim 1 should be read to encompass cleats, when the cleats and the flat bottom surface are formed from the same piece of rubber. Paper 28 at 2 & n.1. As a starting point, Kastner notes the term "sole" is never explicitly limited to a flat bottom surface. Furthermore, Figures 2 and 3 of the patent show a cleated sole and a sole with a high-relief treaded bottom. Id. at 2. The corresponding text in the specification states that these figures show "a modified embodiment of the sole" and "a third modification of the bottom surface of the sole," respectively. Id. at 5 (col. 3, lines 23-26). This suggests the term "sole" can include whatever form – flat, treaded, or cleated – the piece of rubber on the bottom of a shoe may take. The language of the specification supports this idea in other places as well.²

Turning to the second issue, Claim 12 of the '283 patent describes a cleated sole in which the cleats are "formed from a

² In particular, the distinction between "cleat" and "sole" made in Claim 12 is repeated in the specification, but in a way that is more consistent with "sole" encompassing cleats: "In the embodiment shown in FIG. 2, the bottom surface of the sole has cleats, which term will be used to define a resilient outward projection, normally made of rubber or synthetic material, which protrudes from the bottom surface of the footwear sole and are well-known in the art." Id. at 5 (col. 3, lines 61-65). By explaining a sole can "ha[ve]" cleats, the specification suggests cleats may be viewed as part of the sole.

second resilient material." Id. at 6 (line 6, col. 61-62). This language strongly indicates the cleats must be made from a different material than the flat portion of the outsole, in order to fit within Claim 12. Chet's Shoes argues this position, noting the plain meaning of the language and how the phrase "second resilient material" shows up repeatedly in the specification as well. Paper 23 at 14. Kastner disagrees, arguing the phrase "second resilient material" should not exclude from Claim 12 a cleated sole where the cleats are made from the same material as the flat portion of the outsole. Paper 28 at 3-4. To support this counterintuitive reading, Kastner points to various places in the specification where the materials forming the sole and cleat are referred to collectively. See Paper 24-1 at 4 (col. 2, lines 55-67) ("[T]he hardness of the resilient material for the sole and/or the cleat can vary between about 65 to 90 Durometer Shore A The sole and/or cleat may be formed from natural or synthetic rubber"); id. at 6 (col. 5, lines 5-13) (referring to "the material from which the cleat and the sole are formed"); id. (col. 5, lines 40-41) (same).

The claim construction issues of "sole" and "second resilient material" are intertwined for the following reason. If, as proposed by Chet's Shoes, "sole" does not encompass cleats and "second resilient material" requires the cleats to be composed of a different material, the resulting scope of the '283

patent would be artificially narrow. The patent would cover flat soles under Claim 1 and cleated soles where the cleats are made from a different material under Claim 12, but it would not cover cleated soles where the cleats are made from the same material as the sole. On the other hand, if, as proposed by Kastner, "sole" encompasses cleated soles as well as flat ones and "second resilient material" can mean the same or different material, Claim 12 would become wholly redundant. That is, with Claim 1 covering cleated soles, and the "second resilient material" requirement in Claim 12 being read out of existence, nothing would remain to differentiate Claim 12 from Claim 1.

Considering all the arguments presented, the Court finds the term "sole" can include a cleated sole, but the phrase "second resilient material" requires a different material. Claim 1 therefore covers a cleated sole in which the cleats are made of the same resilient material as the flat bottom of the outsole, and Claim 12 is reserved for the specific situation of a cleated sole where the cleats are made from a different material. This claim construction follows the plain language of "second resilient material," gives the '283 patent a common-sense scope, and prevents Claim 12 from becoming wholly meaningless.

b. "Retract"

The parties agree "retract" should have its dictionary definition: to draw back or to draw in. Paper 23 at 12, Paper

26 at 4. The specification confirms that "retract" means to "be forced inwardly into the sole and cleat." Id. at 6 (col. 5, line 37). And both '283 patent claims use "retract" with the modifier "until said tip of said stud is substantially at the plane of" the bottom of the flat sole or the ends of the cleats. Paper 24-1 at 6 (col. 6, lines 18-19); id. at 7 (col. 7, lines 18-19).

The term bears clarification, however, for the following reason. The '283 patent could only have been validly issued with the understanding that "retractable" studs means studs that actually slide or press up into the rubber sole (or cleat), leaving the tip of the stud flush with the immediately surrounding rubber surface. If "retract" had a broader meaning — simply describing a situation where a stud moves generally upwards under pressure and allows an otherwise non-contacting spot on the shoe bottom to contact the ground — the patent could not have been granted on grounds of obviousness. See 35 U.S.C. § 103 (prohibiting patents that would be obvious in light of the prior art). Many shoes have uneven bottom surfaces, with high-relief features such as treads, cleats, ridges, and the like. These shoes often have resilient soles that — whether intended as part of the design or not — flex and absorb some of the relief of the feature when the wearer's weight presses down, bringing lower-relief parts of the sole into contact with the ground.

Studded versions of such soles include angler's shoes, winter traction soles, and so on.

Because the general concept of a flexible sole with high-relief features (including studs) has long existed in the prior art, the Court finds that "retract" in the '283 patent must be given a strict meaning: to pull up into the sole without widespread deformation of adjacent sole material, to the point where the tip of the stud is flush with the immediately surrounding rubber surface (of the sole or cleat). This definition is necessary in order to exclude the prior art. See 35 U.S.C. § 103 (prohibiting obvious patents); Modine Mfg. Co. v. U.S. Int'l Trade Comm'n, 75 F.3d 1545, 1557 (Fed. Cir. 1996) (noting claims "should when reasonably possible be interpreted so as to preserve their validity"), overruled on other grounds, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558, 574 (Fed. Cir. 2000) (en banc) (Festo I).

As incidental support for this strict construction of "retract," the Court notes that Kastner himself acknowledges the term "retract" is what distinguishes his invention from the prior art. Paper 45-8 at 33 (Kastner depo. p.94) ("Nothing features retracting projections in the marketplace today."). Kastner's descriptions of retraction are also consistent with the strict meaning suggested above. Id. at 42 (Kastner depo. p.110) (noting a stud should "retract . . . to the bottom of the rubber surface

that surrounds it"); id. at 44 (Kastner depo. p.127) ("[T]here's retraction . . . to the rubber immediately behind the tip of the stud.").

c. "Weight of a Wearer"

Both Claim 1 and Claim 12 include the limitation that the studs retract under "pressure exerted on said metal studs by the weight of a wearer." Paper 24-1 at 6 (col. 6, lines 16-17); id. at 7 (col. 7, lines 15-16).

The parties do not appear to have radically different understandings of what the phrase "weight of a wearer" means in a general sense, but they reach different conclusions when applying this phrase. Kastner argues the phrase "weight of a wearer" in this case means the pressure exerted by an unspecifiedly large wearer, distributed over one, two, three, or at most four studs. Paper 49-1 at 9; Paper 49-2 ¶ 36; cf. Paper 26 at 5 (discussing the related term "wearer walks"). As reasoning, Kastner notes fewer than all the studs will bear the wearer's weight during the course of ordinary activity, especially when running or walking on uneven terrain. Paper 49-2 ¶¶ 30-33; cf. Paper 26 at 4-5. Chet's Shoes argues the limitation should be construed to mean the pressure exerted by a person of average weight for the size of shoe that is worn, when that wearer is walking, standing, or jumping. Paper 45-1 at 17; cf. Paper 23 at 15 (discussing the related term "wearer walks"); Paper 45-22 (video exhibit).

Chet's Shoes does not specify the number of studs over which the wearer's weight should be distributed, but presumably views the appropriate number as more than four. See Paper 45-1 at 17.

Much of this debate involves questions of fact, and must wait until the infringement stage. As a matter of claim construction, the Court simply applies the following definition to "weight of a wearer": the pressure exerted by a person of average weight for the size of shoes in question, distributed over a number of studs that will typically bear the weight of the wearer in the activities for which the shoes are designed. This definition flows directly from the text of the claims, as well as the specification. In particular, the specification makes clear stud retractability should correlate with expected use, which necessarily requires an estimate of the size of the wearer and how many studs will bear the user's weight. Paper 24-1 at 4 (col. 1, lines 44-65). The '595 patent – which is designated as an improvement on the '283 patent – notes this fact explicitly. Paper 45-5 at 6 (col. 1, lines 55-58) ("Thus, where a woman's shoe is to be made with such a sole, it is apparent that pressure on the resilient sole will be less than that exerted by a shoe where the wearer is a 300-lb man.").

ii. Claim Construction of the '595 Patent

Three issues of claim construction exist with respect to the '595 patent: (1) the meaning of "retract," (2) the meaning of

"non-uniform" resilient material, and (3) the meaning of "embedded . . . at said more resilient portion." The first can be disposed of quickly, since the Court finds the same interpretation of the word "retract" applies as discussed above with respect to the '283 patent. The second and third issues are addressed below.

a. "Non-Uniform" Resilient Material

The '595 patent includes a claim limitation requiring the sole to be made of "non-uniform" resilient material, with a "less resilient exterior portion" and a "more resilient interior portion." Paper 45-5 at 8 (col. 5, line 64; col. 6, lines 8-9). Chet's Shoes argues this claim limitation must be read as requiring distinct layers of material with different resiliencies. Paper 45-1 at 18-21. For support, Chet's Shoes points to several places in the prosecution history where Kastner's patent counsel describes the non-uniform resilience in terms of layers. Id. Kastner opposes this argument. See Paper 49-1; Paper 49-3 at 10-11.

The Court finds the prosecution history does not support Chet's Shoes' narrow reading of "non-uniform" resilient material. The references in the prosecution history to layers were only in passing, as possible embodiments of the '595 patent concept. See Paper 45-19. The main concept with which both the patent examiner and Kastner's counsel were concerned was the varying

resilience of the sole; whether this was achieved by use of layers or otherwise appears to have been unimportant. See id. Moreover, the '595 patent contains a diagram showing a non-uniform sole where the change in resilience is gradual, rather than in layers. Paper 45-5 at 2 (Figure 2). For these reasons, the Court holds the term "non-uniform" does not require any particular layer structure.

b. "Embedded . . . at Said More Resilient Portion"

Also as a matter of claim construction, the Court briefly addresses the limitation in Claim 1 and Claim 8 of the '595 patent requiring the stud anchor to be "embedded in said sole at said more resilient portion." Kastner argues this limitation is broad enough to include a situation where the stud anchor is actually embedded in a less resilient portion of the sole, so long as somewhere nearby there exists a more resilient portion of sole. Paper 49-1 at 11. As reasoning, Kastner points to the word "at," suggesting it requires only general proximity. Paper 49-1 at 11; Paper 49-3 ¶ 18. Kastner also suggests when pressure is applied to a stud anchored in less resilient material and that stud pushes up in a sole with a more resilient layer above, the anchor at that moment is surrounded by more resilient material and qualifies as being "embedded . . . at said more resilient portion." Paper 49-1 at 11.

The Court rejects Kastner's argument and finds as a matter of law that "embedded . . . at said more resilient portion" requires the stud anchor to actually be touching the more resilient sole material.³ The claims' plain language supports this reading, as does the patent specification. All textual references and figures in the '595 patent indicate the stud anchor should be in contact with the more resilient material when no weight is on the shoe. See, e.g., Paper 45-5 at 2, 4-5 (Figures 3, 5, 6). The mere existence of softer material above the stud anchor cannot satisfy the claim limitation; such an interpretation would be far too broad and would be in danger of encompassing the prior art. See Modine Mfg., 75 F.3d at 1557.

D. Infringement

The Court now turns to infringement. Infringement is a question of fact, both when evaluated literally and under the doctrine of equivalents. Braun Inc., 975 F.2d at 819. Thus, for a court to grant summary judgment, the facts must be such that "no reasonable jury" could find infringement. U.S. Philips, 505 F.3d at 1375.

The following discussion focuses on the four independent claims at issue, since "dependent claims cannot be found

³ As one of the diagrams shows, the stud anchor can be placed at the boundary between the softer and harder materials, with the softer material immediately above it. Paper 45-5 at 4 (Figure 5). This situation still involves the stud anchor touching the more resilient material.

infringed unless the claims from which they depend have been found to have been infringed." Wahpeton Canvas Co. v. Frontier, Inc., 870 F.2d 1546, 1553 (Fed. Cir. 1989). The Court turns to the '595 patent first.

i. Infringement of the '595 Patent

Claim 1 of the '595 patent describes a shoe sole of varying resilience, with metal studs placed in the sole with stud anchors located at a portion of higher resilience. As explained above, the limitation of stud anchors being "embedded in said sole at said more resilient portion" means the stud anchors must actually be in contact with the more-resilient sole material. Assuming without deciding that the Accused Products' soles can be considered soles of varying resilience per the '595 patent, the facts before the Court clearly show no stud anchors in the Accused Products are in contact with a relatively more-resilient layer of the sole. Rather, all studs are embedded fully in the less-resilient rubber outsole. Papers 45-9, 45-10, 45-11, 45-12 (physical exhibits of the Accused Products); Paper 51-2 (physical exhibit of cut-away outsole displaying stud). Because no reasonable jury could find this claim limitation met, there is no literal infringement of Claim 1.

Kastner argues in the alternative for infringement of Claim 1 under the doctrine of equivalents. Paper 53 at 5. The doctrine of equivalents allows a court to find patent

infringement even when literal infringement does not exist, if the only difference between the patent and the device in question is “[u]nimportant and insubstantial.” Festo Corp. v. Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 731 (2002) (Festo II). Kastner believes the limitation of stud anchors being “embedded in said sole at said more resilient portion” is met by equivalence, so long as the sole in question has more-resilient material located above the stud anchor. See Paper 49-1 at 11; Paper 49-3 ¶¶ 18-19 (arguing there is equivalence if “the fact that the midsole is softer [has] any effect o[n] the ease of depression of the metal studs”).

The Court rejects Kastner’s argument and finds no infringement under the doctrine of equivalents. Such a broad view of the ‘595 patent’s main limitation would result in large swaths of the prior art being ensnared, and the doctrine of equivalents cannot be applied to reach this result. See Conroy v. Reebok Int’l, Ltd., 14 F.3d 1570, 1577 (Fed. Cir. 1994); Wilson Sporting Goods Co. v. David Geoffrey & Assoc., 904 F.2d 677, 683 (Fed. Cir. 1990) (“[T]here can be no infringement if the asserted scope of equivalency of what is literally claimed would encompass the prior art.”), overruled on other grounds, Cardinal Chem. Co. v. Morton Int’l, Inc., 508 U.S. 83 (1993). Moreover, the limitation of stud anchor placement in the soft material is a functional one: the farther apart the stud anchor and soft

material are, the less the '595 patent's essential design of easily-retracting studs is fulfilled. It would be inappropriate to use the doctrine of equivalents to weaken this functional limitation, especially here, where a significant amount of hard rubber overlays the stud anchor. See, e.g., Sage Prods. Inc. v. Devon Indus., 126 F.3d 1420, 1424-25 (Fed. Cir. 1997) (discussing limits on the doctrine of equivalents when functionality is affected).

Overall, no reasonable jury could find infringement of Claim 1 either literally or under the doctrine of equivalents, so the Court grants summary judgment in favor of Chet's Shoes with respect to Claim 1 of the '595 patent. Id. at 1423.

Claim 8 of the '595 patent contains an additional limitation that the sole be "formed with a recess at the location where said tip portion [of said stud] extends outwardly from the plane of said bottom surface." Paper 45-5 at 8 (col. 6, lines 53-55). The facts conclusively establish that the Accused Products have no such recess around the studs, nor does any feature of the Accused Products create an equivalent to a recess or annular groove.⁴ The Court therefore finds no infringement, either

⁴ The only argument Kastner presents regarding the doctrine of equivalents and the recess limitation is factually baseless and logically inconsistent: "[T]he fact [that] the accused product requires slightly more force to retract the metal studs results in the same movement of the metal stud within the cleat as if there were a recess and easier retraction." Paper 53 at 5.

literally or under the doctrine of equivalents, and grants summary judgment in favor of Chet's Shoes with respect to Claim 8 of the '595 patent.⁵

ii. Infringement of the '283 Patent

Claim 12 of the '283 patent includes a limitation that the cleats be "formed from a second resilient material." Paper 24-1 at 6 (col. 6, lines 61-62). As explained above, this limitation requires the cleats to actually be made from a different material than the sole. In the Accused Products, there is no dispute that the cleats are formed from the same piece of rubber as the flat portion of the outsole. See Papers 45-9, 45-10, 45-11, 45-12, 51-2 (physical exhibits). Because no reasonable jury could find the "second resilient material" limitation met, there can be no literal infringement of Claim 12.

The Court also declines to find infringement of Claim 12 under the doctrine of equivalents. The Supreme Court has made clear that "if a theory of equivalence would entirely vitiate a particular claim element," a trial court can find non-infringement under the doctrine of equivalents as a matter of summary judgment. Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S.17, 39 n.8 (1997). Here, it would "render[] the

⁵ An alternative basis for non-infringement of Claim 8 is the stud anchor placement condition discussed above with respect to Claim 1, since Claim 8 similarly requires stud anchors to be "embedded in said sole at said more resilient portion." Paper 45-5 at 8 (col. 6, lines 51-52).

pertinent limitation meaningless" to hold the Accused Products' single-material outsole equivalent to a sole in which the cleats are made of a second resilient material. Freedman Seating Co. v. Am. Seating Co., 420 F.3d 1350, 1359 (Fed. Cir. 2005). For this reason there can be no infringement of Claim 12 under the doctrine of equivalents. Id.; Warner-Jenkinson, 520 U.S. at 39 n.8.

Finding no infringement either literally or under the doctrine of equivalents, the Court grants summary judgment in favor of Chet's Shoes with respect to Claim 12 of the '283 patent.

Turning to Claim 1 of the '283 patent, two limitations are primarily at issue:⁶ whether the studs in the Accused Products actually "retract," and if so, whether they retract under the "weight of a wearer." As discussed above, "retract" means pulling up into the sole such that the tip of the stud is flush with the immediately adjacent rubber surface, with little deformation of the surrounding sole/cleat material. "Weight of a wearer," in turn, means the pressure exerted by a person of

⁶ Chet's Shoes also argues the limitation of studs being "mounted in said sole" is not met because the studs in the Accused Products are embedded in the cleats, rather than in the sole. See Paper 45-1 at 15. This argument cannot prevail, however, as the undisputed facts show the cleats and soles are formed from the same piece of rubber, Paper 51-2, and the Court interprets the term "sole" broadly (as explained above) to include cleated soles. Therefore the limitation of studs being "mounted in said sole" is literally met.

average weight for the size of shoes in question, distributed over a number of studs that will typically bear the weight of the wearer in the activities for which the shoes are designed.

Kastner submits evidence he believes shows retraction under the weight of a wearer. First, he provides a declaration alleging he was able to retract the studs in two ways – by using a lever device with a Chatillon force gauge, and by having his employee wear the Accused Products for four weeks and then step fully on the heel portion.⁷ Paper 49-2 ¶¶ 9-12. Second, Kastner submits force measurements from the lever test, purportedly describing the amount of pressure required to retract each stud. Paper 49-6. Third, Kastner provides two sheets of heel stamp imprints from the employee test, which show contact points between sole rubber and the ground. Papers 49-4, 49-5. Kastner argues this evidence is enough to show retraction under the weight of a wearer. Paper 49-1 at 8-10; Paper 53 at 2-3.

Chet's Shoes argues Kastner fails to show retraction under the weight of a wearer, and submits evidence of its own. Paper 45-1 at 16-17; Paper 51 at 4-5. First, Chet's Shoes provides an expert report from Jon Nicholson asserting the studs in the Accused Products do not retract under the weight of a wearer. Paper 45-21 at 7-8, 11. The Nicholson expert report includes

⁷ Kastner briefly mentions a third type of test, involving a hand clamp, but does not describe the results of this test. Paper 49-2 ¶ 10.

force measurements for the pressure purportedly required to retract the various studs. Id. at 20-22. Second, Chet's Shoes provides a video of Nicholson standing, stepping, and jumping in the Accused Products, with contact points between sole rubber and the ground marked in black shoe polish. Paper 45-22.

The dispositive issue here is whether the studs in the Accused Products actually retract in a strict sense. Turning to Kastner's evidence, the declaration and force measurements do not show retraction directly. Both documents assert the studs retract, but this begs the question of what is meant by "retract." In terms of actually demonstrating retraction, Kastner relies on the heel stamp imprints. See, e.g., Paper 49-2 ¶¶ 34, 37, 46 (indicating the heel stamp impressions satisfactorily demonstrate what Kastner believes is retraction). Kastner's heel stamp imprints also correspond well with the results of Nicholson's video test. See Paper 45-22 (showing Nicholson wearing the Accused Products, putting all his weight on one heel and then the other, then displaying the resulting prints). The evidence before the Court is therefore consistent with regard to what happens when a wearer's weight is placed on the heel section of the Accused Products.⁸

⁸ Heel studs are the appropriate focus in evaluating retraction, since both sides' evidence indicates the heel studs show the most likelihood of retraction. See Paper 45-21 at 20; Paper 49-6. Kastner focuses his argument on the heel studs, as well. See Paper 45-18 at 1; Paper 49-1 at 8-9; Paper 53 at 3.

The Court finds the evidence does not show retraction in a strict sense, even when viewed in a light most favorable to Kastner. The heel stamp imprints and Nicholson's video show the only contact points between sole rubber and the ground are at the rim of the heel section and, in a few prints, midway between the studs. See Papers 49-4, 49-5 (heel stamp impressions); Paper 45-22 (video). This clearly demonstrates the surface of the rubber outsole immediately adjacent to the studs remains elevated and does not contact the ground, even when the wearer's full weight is on the heel section of the shoe. Rather than truly retracting, the studs continue to protrude from the adjacent surface; contact between sole rubber and the ground is created by broader-scale deformation of the sole. As explained above, "retract" in the '283 patent must mean pulling up into the sole such that the tip of the stud is at the level of the immediately adjacent rubber surface. The evidence conclusively demonstrates this is not happening here. Because no reasonable jury could find retraction on the evidence before the Court, there can be no literal infringement of Claim 1.

Kastner argues infringement of Claim 1 under the doctrine of equivalents, as well. Paper 53 at 4-5. This argument is unavailing, however, since the claim limitation of "retract" goes directly to the function of the '283 patent, and as noted above the doctrine of equivalents cannot be used in a way that alters

functionality. See Sage Prods. Inc., 126 F.3d at 1424-25. Applying the doctrine of equivalents here would also risk encompassing the prior art. See Reebok Int'l, 14 F.3d at 1577. Thus there is no infringement of Claim 1 under the doctrine of equivalents.

In sum, the Court finds no infringement, either literally or under the doctrine of equivalents, and accordingly grants summary judgment in favor of Chet's Shoes with respect to Claim 1 of the '283 patent.

E. Motion to Strike

Chet's Shoes asks the Court to strike Kastner's cross-motion for summary judgment and the declaration of Walter Ames for violating scheduling order deadlines and other reasons. Paper 52. This motion is denied in light of the Court's disposition on the merits.

III. Conclusion

For the foregoing reasons, Chet's Shoes' motion for summary judgment (Paper 45) is GRANTED and Kastner's motion for summary judgment (Paper 48) is DENIED. Chet's Shoes' motion to strike (Paper 52) is DENIED.

Dated at Brattleboro, in the District of Vermont, this 30th day of March, 2010.

/s/ J. Garvan Murtha

Honorable J. Garvan Murtha
Senior United States District Judge